AMENDMENTS TO THE CLAIMS

This listing of replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently amended) A process for isolation of one or more bio-molecule(s) from a bio-molecule-containing fluid, comprising the steps of:

a) optionally adjusting the pH of the bio-molecule-containing fluid;

b) bringing the bio-molecule-containing fluid to a temperature of at least ~~40~~50°C;

c) applying a volume of said bio-molecule-containing fluid having a temperature of at least ~~40~~50°C to an expanded bed adsorption column comprising an adsorbent, said expanded bed column is operated with a linear flow rate of at least 1,500 cm/hour during loading of the bio-molecule-containing fluid to the chromatographic column;

d) optionally washing the expanded bed adsorption chromatographic column; and

e) eluting at least one bio-molecule from the adsorbent,

wherein said fluid is selected from at least one of the group consisting of a body fluid, a plant extract, an animal tissue extract, animal blood plasma, animal serum, water from the food and/or feed industry ~~process water from the food and/or feed industry~~, and fluids derived therefrom.

2. (Previously Presented) The process according to claim 1, wherein the expanded bed adsorption chromatographic column is a large-scale column comprising at least 10 liters (l) of sedimented adsorbent.

3. (Previously Presented) The process according to claim 1, wherein the expanded bed adsorption chromatographic column is a large-scale column comprising from about 100 to 1000 l of sedimented adsorbent.

4. (Previously Presented) The process according to claim 1, wherein the expanded bed adsorption chromatographic column has a diameter of about 50 cm to 200 cm.

5. (Previously Presented) The process according to claim 1, wherein the one or more bio-molecule(s) has a molecular weight of at least 2000 Daltons.

6. (Previously Presented) The process according to claim 1, wherein the one or more bio-molecule(s) is/are selected from the group consisting of peptides, proteins, lipids, lipoproteins, polysaccharides, DNA, RNA, plasmids, polynucleotides, viral particles, cell constituents, cells and combinations thereof.

7. (Original) The process according to claim 6, wherein said proteins is selected from the group consisting of lactoferrin, β-lactoglobulin, α-lactalbumin, immunoglobulins and lactoperoxidase.

8. (Cancelled)

9. (Previously Presented) The process according to claim 1 wherein the body fluid is selected from the group consisting of milk, plasma, urine, egg white and fluids derived therefrom.

10. (Previously Presented) The process according claim 1, wherein the adsorbent consists of adsorbent particles wherein 50% of the number of particles has a particle size of at most 80 µm.

11. (Previously Presented) The process according to claim 1, wherein the adsorbent consists of adsorbent particles wherein 50% of the number of particles has a particle size of at most 70 µm.

12. (Previously Presented) The process according to claim 1, wherein the adsorbent particle has a density of at least 1.5 g/ml.

13. (Previously Presented) The process according to claim 1, wherein the linear flow-rate is from about 1,500 to 12,000 cm/hr.

14. (Cancelled)

15. (Previously Presented) The process according to claim 1, wherein the volume applied per litre of adsorbent in one hour is at least 50 l.

16. (Previously Presented) The process according claim 1, wherein the adsorbent consists of adsorbent particles wherein 50% of the number of particles has a particle size of at most 100 μm.

17. (Previously Presented) The process according to claim 1, wherein the volume applied per litre of adsorbent in one hour is at least 100 l.